AG Contract No KR00 1986TRN ADOT ECS File No. JPA 00-165

Project: H5765 01L

Section: US-60 and US-70 Drainage Studies

INTERGOVERNMENTAL AGREEMENT

BETWEEN THE STATE OF ARIZONA AND

GILA COUNTY, ARIZONA

I. RECITALS

- 1 The State is empowered by Arizona Revised Statutes Section 28-401 to enter into this agreement and has by resolution, a copy of which is attached hereto and made a part hereof, resolved to enter into this agreement and has delegated to the undersigned the authority to execute this agreement on behalf of the State.
- 2. The County is empowered by Arizona Revised Statutes Section 11-251 to enter into this agreement and has by resolution, a copy of which is attached hereto and made a part hereof, resolved to enter into this agreement and has authorized the undersigned to execute this agreement on behalf of the County.
- 3. The State and the County desire to participate in a drainage study for floodplain delineation and to develop conceptual alternatives, which will encompass portions of US-70 at the following location; Taco Bell Wash (MP 251.1), and portions of US-60 at the following locations; (1) Picacho Wash MP 248.0, (2) Miami-Claypool Fingers MP 243.2. The study will be conducted in phases, at a total estimated cost of \$\$81,478.00. The parties hereto agree that the County shall be the lead agency for the Project.

THEREFORE, in consideration of the mutual agreements expressed herein, it is agreed as follows:

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Wicky V. Traenewold

II. SCOPE

1. The County will:

- a. Advertise for, select and hire a qualified drainage engineering firm to conduct the study. Comply with all State procurement laws, rules and regulations.
- b. Insure the study is conducted generally in accordance with the Scope of Work, which is attached hereto as Attachment A, and made a part hereof. Provide the State timely copies of all study progress reports, and insure the incorporation of State review comments
- c. Be responsible for the cost of the study over and above the State's contribution of \$60,000.00, in an amount currently estimated at \$21,478.00. No more often than monthly, invoice the State for it's share of the study costs, in a total amount not to exceed at \$60,000.00.
 - e. Upon completion of the study, provide the State a final report.

2. The State will:

- a. Review the US-60 and US-70 drainage study progress submittal documents and provide comments.
- b. Within 30 days after receipt of invoices, and all deliverables identified in the scope of work, pay the County the State share of the cost of the study, in an amount not to exceed \$60,000,00.

III. MISCELLANEOUS PROVISIONS

- 1. This agreement shall remain in force and effect until completion of said study; provided, however, that this agreement, except any provisions herein for maintenance, which shall be perpetual, may be cancelled at any time prior to the commencement of performance under this agreement, upon thirty (30) days written notice to the other party
 - 2. This agreement shall become effective upon filing with the Secretary of State.
- 3. This agreement may be cancelled in accordance with Arizona Revised Statutes Section 38-511.
- The provisions of Arizona Revised Statutes Section 35-214 are applicable to this contract.
- 5 In the event of any controversy which may arise out of this agreement, the parties hereto agree to abide by required arbitration as is set forth for public works contracts in Arizona Revised Statutes Section 12-1518.

6. All notices or demands upon any party to this agreement shall be in writing and shall be delivered in person or sent by mail addressed as follows:

Department of Transportation Joint Project Administration 205 S. 17 Ave MD 616E Phoenix, AZ 85007 Gila County County Administrator 1400 E. Ash Street Globe, AZ 85501

7 Attached hereto and incorporated herein is the written determination of each party's legal counsel that the parties are authorized under the laws of this state to enter into this agreement and that the agreement is in proper form.

IN WITNESS WHEREOF, the parties have executed this agreement the day and year first above written.

GILA COUNTY

STATE OF ARIZONA

Department of Transportation

RON CHRISTENSEN, Chairman

Board of Supervisors

WILLIAM J HIGGINS

Deputy State Engineer

ATTEST

STEVEN BESICH

Clerk of the Board

RESOLUTION

BE IT RESOLVED on this 24th day of September 2000, that I, the undersigned MARY E. PETERS, as Director of the Arizona Department of Transportation, have determined that it is in the best interests of the State of Arizona that the Department of Transportation, acting by and through the Intermodal Transportation Division, to enter into an agreement with Gila County for the purpose of defining responsibilities for conducting a drainage study on US-60 and US-70.

Therefore, authorization is hereby granted to draft said agreement which, upon completion, shall be submitted to the Deputy State Engineer for approval and execution.

DAVID R. ALLOCCO, P.E.

Assistant State Engineer Engineering Technical Group for Mary E Peters, Director

APPROVAL OF THE GILA COUNTY ATTORNEY

I have reviewed the above referenced proposed intergovernmental agreement, between the DEPARTMENT OF TRANSPORTATION, HIGHWAYS DIVISION, and GILA COUNTY and declare this agreement to be in proper form and within the powers and authority granted to the County under the laws of the State of Arizona.

DATED this ______ day of _______, 2000.

County Attorney



STATE OF ARIZONA

TRN Main: (602) 542-1680 Direct: (602) 542-8855

Fax: (602) 542-3646

OFFICE OF THE ATTORNEY GENERAL

JANET NAPOLITANO ATTORNEY GENERAL

1275 WEST WASHINGTON, PHOENIX, AZ. 85007-2926

Main Phone: (602) 542-5025 FACSIMILE: (602) 542-4085

INTERGOVERNMENTAL AGREEMENT DETERMINATION

A.G. Contract No. KR00-1986TRN, an agreement between public agencies, has been reviewed pursuant to A.R.S. § 11-952, as amended, by the undersigned Assistant Attorney General who has determined that it is in the proper form and is within the powers and authority granted to the State of Arizona.

No opinion is expressed as to the authority of the remaining parties, other than the State or its agencies, to enter into said agreement.

DATED July 19, 2001.

JANET NAPOLITANO Attorney General

SUSAN E DAVIS

Assistant Attorney General Transportation Section

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BOARD OF SUPERVISORS

GILA COUNTY, ARIZONA

Date: November 14, 2000

RONALD A. CHRISTENSEN

Chairman

EDWARD G. GUERRERO

Vice-Chairman

CRUZ SALAS

Member

STEVEN L. BESICH

Clerk of the Board

By: Marian Sheppard

Chief Deputy Clerk

Gila County Courthouse

Globe, Arizona

PRESENT: Ronald A. Christensen, Chairman; Edward G. Guerrero, Vice-Chairman; Cruz Salas, Member; Steven L. Besich, County Administrator/Clerk; and, Mark Gunning, Deputy County Attorney.

The Gila County Board of Supervisors met in Special Session this date.

Mark Gunning led the Pledge of Allegiance and Mariano Gonzalez delivered the Invocation.

Upon motion by Supervisor Salas, seconded by Vice-Chairman Guerrero, the Board unanimously approved the Finance Report of \$383,523.12 disbursed for County expenses by Claim Nos. X122573 through X122639 and X292601 through X292869, and paid during the period of November 7-13, 2000. The following Finance Report was approved for the same reporting period: \$61,895.31 disbursed for County expenses by Claim Nos. X292554 through X292600. (An itemized list of vouchers is permanently attached to these minutes.)

Upon motion by Vice-Chairman Guerrero, seconded by Supervisor Salas, the Board unanimously approved the Personnel Agenda for the period November 7-13, 2000. (An itemized list of personnel actions is permanently attached to these minutes.)

Vice-Chairman Guerrero, the Board unanimously approved Resolution No. 00-11-03. (A copy of the resolution is permanently attached to these minutes.)

John Trujillo requested approval of a Special Use Permit issued by the U.S. Dept. of Agriculture, Forest Service, to the Gila County Board of Supervisors for the operation of the Sheriff's First Aid/Rescue Substation located adjacent to Roosevelt Lake through December 31, 2019. Mr. Trujillo explained that this Permit is a renewal of an existing agreement with the Forest Service. Upon motion by Supervisor Salas, seconded by Vice-Chairman Guerrero, the Board unanimously approved the Special Use Permit.

Mr. Trujillo requested approval of an Intergovernmental Agreement (#JPA 00-165) between the Arizona Dept. of Transportation and Gila County for the purpose of defining responsibilities to conduct a drainage study for floodplain delineation and to develop conceptual alternatives that will encompass portions of US-60 (Picacho Wash MP 248.0 and Miami-Claypool Fingers MP 243.2) and portions of US-70 (Taco Bell Wash MP 251.1). Upon motion by Vice-Chairman Guerrero, seconded by Supervisor Salas, the Board unanimously approved the Intergovernmental Agreement.

Mr. Trujillo requested approval of a Lease Agreement between BHP Copper Inc. and Gila County for the lease of approximately 80 acres of land located adjacent to the Russell Gulch Landfill for a period of 90 days at a cost of \$1. Gila County placed a mobile home upon BHP's land in order to house a watchman for the landfill. Due to a miscommunication with BHP, Gila County was unaware that it did not have permission for the placement of the mobile home. This lease will allow Gila County to proceed with the immediate placement of the mobile home upon the land. In the interim, Gila County and BHP will develop an agreement for Gila County to purchase the land for future landfill expansion. Glen (last name- inaudible), a resident of Little Acres, voiced his concern about future landfill expansion into his neighborhood. Mr.

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Scope of Work for Phase 1 Floodplain Delineation in Gila County

The project is comprised of two phases, floodplain delineation and conceptual alternatives for existing drainage problems. Phase 1 comprises: a. Aerial mapping for current and future floodplain delineations, as shown in Exhibit A. b. Legal advertisement for all study washes. c. Hydrology for the floodplain delineation, including determine Miami Wash drainage area at Roosevelt Lake. d. Prepare 1.1 river miles of Floodplain Delineation for "Taco Bell Wash."

Floodplain Delineation Procedure Notes

The project consists of approximately 1.1 miles of new floodplain delineation, which will tie into the previous Federal Emergency Management Agency delineation for McMillen Wash. The County will submit the Floodplain Delineation Study to ADWR for review and approval. Then ADWR will forward the study to FEMA as an Existing Data Study (XDS), which will speed up processing and avoid payment of FEMA review fees. If the FEMA process changes, Gila County will be responsible for paying FEMA review fees, if any

Task 1 - Coordination

Task 1.1 - Coordination

The consultant's Project Manager will direct the project team and will be the point of contact between the Engineer and the County. Gila County's Project Manager will be the primary point of coordination for this portion of the project. The Project Manager will attend all meetings, and keep the County informed on all aspects of the project. The Project Manager will coordinate with Arizona Department of Transportation (ADOT), Arizona Department of Water Resources (ADWR), Town of Miami, City of Globe and FEMA, as necessary. Property owners will be contacted for access for surveys and field reconnaissance. If letters need to be sent, the City or County will supply property owner names and addresses. Public meetings are not part of the Scope of Work.

Task 1.2 - Legal Ad

Publish a legal advertisement twice, with approximately one week between publications, in two different local newspapers.

Task 2 - Data Collection

Collect and review previous drainage studies, floodplain delineations, and other pertinent data. The location and extent of existing flooding problems will be documented. Records, reports and other background information available at Gila County, the Town of Miami, the City of Globe, ADOT and other sources will be acquired. Data collection will include any available topographic mapping, historical flooding information, any available As-Built plans for existing structures, and any Letters of Map Amendment and/or Revisions (LOMA/LOMRs).

Task 3 - Topographic Mapping

Obtain new topographic mapping for study wash areas not covered by the 30 December 1998 four-foot contour interval mapping prepared for FEMA Project Number EMF-1998-CO-0081. The new topographic mapping shall cover the area sufficient to include the floodplain mapping limits found on Exhibit A. The new mapping for the Miami-Claypool fingers will be mapped with two-foot contours due to its complex and urban nature. The rest of the study washes will be at a four-foot contour interval. Mapping text shall be sized for presentation on 200 scale maps. The total area of topographic mapping is estimated at 2.4 square miles. The new mapping shall be edge-matched to tie into the December 1998 topographic maps.

Coordinate the aerial surveying work with the aerial mapping subcontractor. Quality control for the mapping and surveys will meet the standards of FEMA 37, Flood Insurance Study Guidelines and Specifications for Study Contractors, January 1995.

Digital Terrain Models (DTM) will be prepared and submitted. The mapping will be submitted to Gila County, as soon as it meets FEMA 37 requirements. The submittal will contain the December 1998 mapping as well as the new mapping. Digital orthophotos shall be provided.

Task 4 – Field Survey

Task 4.1 - Survey Coordination and Accuracy Check

Coordinate the aerial surveying work with the aerial mapping subcontractor, or the Gila County surveyor. Quality control for the mapping and surveys will meet the standards of FEMA 37, Flood Insurance Study Guidelines and Specifications for Study Contractors, January 1995. The accuracy of mapping shall be verified utilizing procedures called for in the FEMA 37 document. Twenty spot elevations and four check sections will be used.

Task 4.2 - Ground Control and Culvert Survey (Optional)

Ground control shall be prepared in State Plane Coordinates, using 1983 NAD, which is the same as the December 1998 mapping. Vertical control will be based on the National Geodetic Datum of 1929 (NGVD). Survey control shall be of at least third order accuracy.

Permanent elevation reference marks (ERMs) will be established according to the FEMA 37 document. All culverts, bridges, and hydraulic structures will be surveyed. One copy of all field survey notes will be submitted, in addition to the copy contained in the Technical Data Notebook.

The Ground Control and Culvert Survey work is not authorized with the Notice to Proceed, and may be authorized in writing by the County. If it is not authorized, the County will supply the required information.

Task 5 - Hydrology

Peak flow rates for the 100-year flood for the study wash will be determined using the USGS Regional Regression equations set forth in the ADOT Hydrology Manual.

CONSULTING ENGINEERS

Task 7 – Deliverables

7.1 Gila County Review Submittal

- Computer diskette with the new and 1998 aerial mapping.
- Field survey notes.
- Floodplain Work Maps, at a scale of 1 inch = 200 feet, bluelines.
- One (1) copy of the Technical Data Notebook.

7.2 ADWR Review submittal

- Original Affidavits of Publication.
- Two (2) copies of the Technical Data Notebook, including HEC-RAS files on diskette.
- Two sets of completed FEMA forms.
- Two copies of the current FIRM panels showing the proposed delineations as an overlay map, at the FIRM Panel scale.

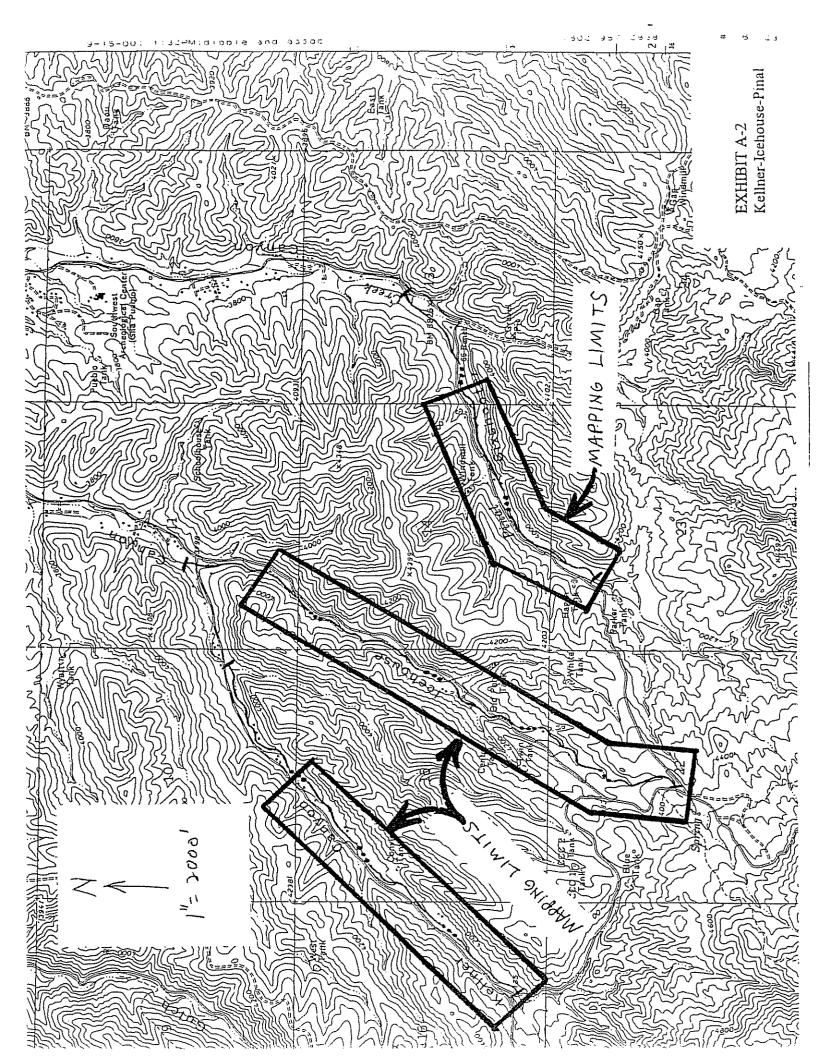
7.3 Final Submittal

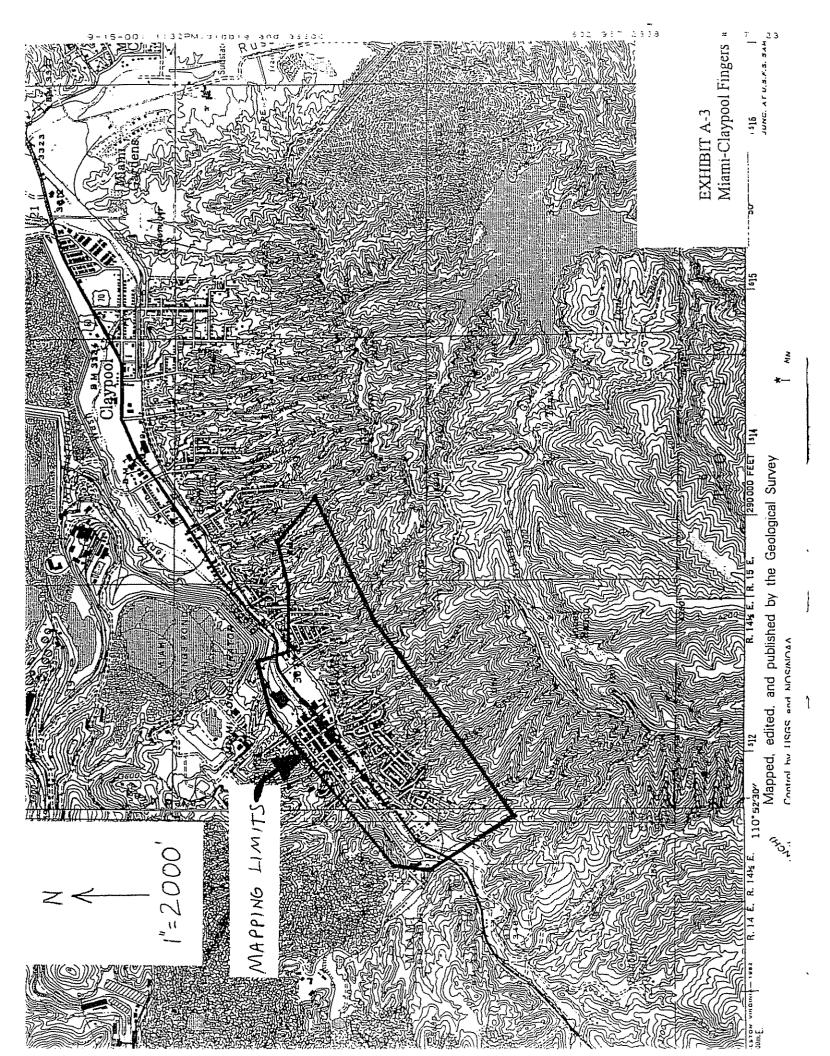
- Four (4) copies of the Technical Data Notebook, including HEC-RAS files on diskette.
- One (1) complete set of the topographic base maps on mylar, showing the floodplain delineation, sealed by the appropriate registrant(s).
- Computer diskette containing AutoCad files showing topography and floodplains.

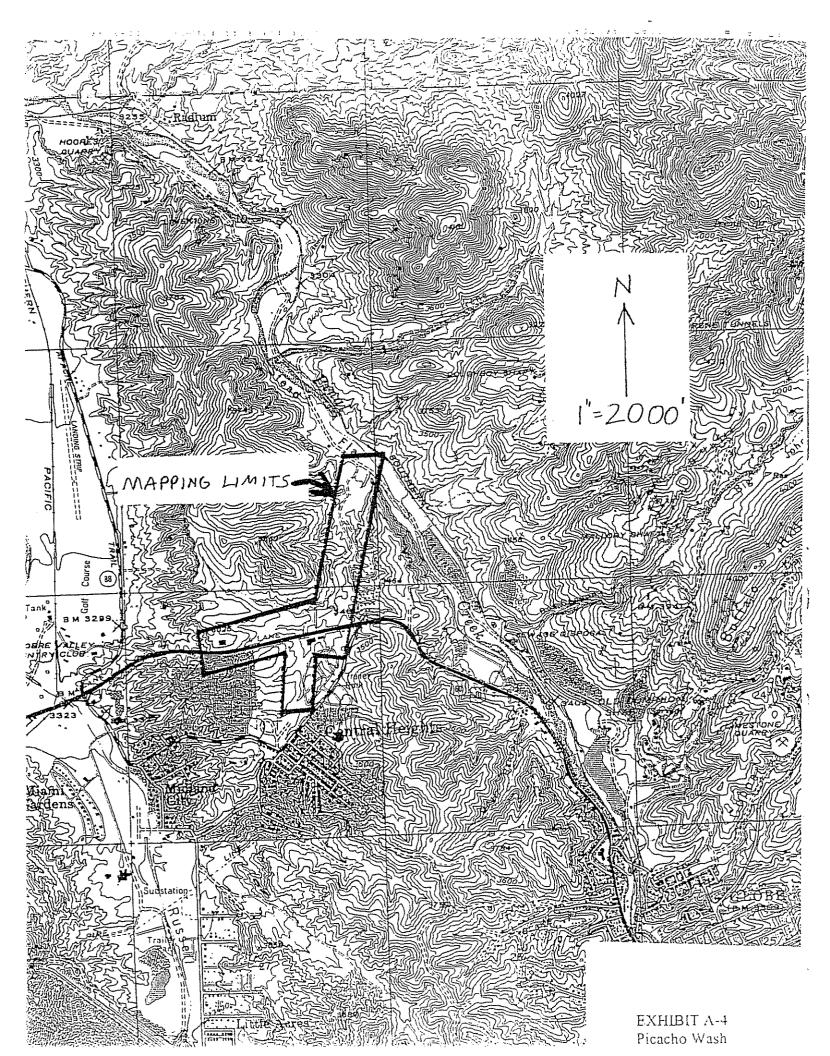
References:

Reference to the Flood Insurance Re-Study is for:

Gila County, Arizona, Flood Insurance Re-Study, Technical Support Data Notebook, Volumes 1 and 2, Prepared by Dibble & Associates for the Federal Emergency Management Agency under Contract Number EMF-1998-CO-0081, Draft Version dated November 1999, currently being reviewed by FEMA.







Scope of Work For Phase 2 Conceptual Drainage Alternatives in Gila County

Conceptual Drainage Alternatives for Existing Drainage Problems

The purpose of the Conceptual Drainage Alternatives is to discuss identifiable drainage problems for "Taco Bell Wash" and present a minimum of three conceptual alternatives for identified problem areas. Conceptual alternatives will be submitted in a bound report. Each alternative will include drawings, tables or maps, as appropriate, and a narrative discussing the advantages and disadvantages. The alternatives will be evaluated on engineering feasibility, impact to property owners, approximate costs, the amount of protection provided, necessary maintenance and utility conflicts and their need for relocation. Hydrologic and hydraulic computations and analyses will be presented in the report.

Task 1 – Meetings and Coordination

1.1 Coordination

The consultant's Project Manager will direct the project team and will be the point of contact between the Engineer and the County. Gila County's Project Manager will be the primary point of coordination for this portion of the project. The Project Manager will attend all meetings, and keep the County informed on all aspects of the project. The Project Manager will also coordinate with Arizona Department of Transportation (ADOT), City of Globe and FEMA, as necessary.

1.2 Data Collection

The data collection obtained in the Phase 1 Floodplain Delineation Study will be utilized. In addition, information will be collected from utility companies with facilities in the area. ADOT will supply any available information for the study washes, such as As-Builts, photographs, scour reports, drainage maintenance reports, easements, permits and Right-of-Way maps.

1.3 Site Visits

One site visit meeting will be held to discuss the drainage problems and possible solutions. Representatives from ADOT, the City of Globe and Gila County will be requested to attend.

1.4 Meetings

One coordination meeting will occur at the offices of the County. The meeting will occur during the alternatives formulation or analysis task.

Task 2.0 - Field Survey

Task 2.1 - Survey Coordination

Coordinate the aerial surveying work with the aerial mapping subcontractor, or the Gila County surveyor.

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Task 2.2 - Conceptual Design Survey (Optional)

Field surveys will be undertaken for existing street inlets and other features within the southern Right-of-Way not surveyed previously for Phase 1. Storm sewer (if not previously surveyed) and sanitary sewer invert elevations and aboveground utility locations will be obtained.

Ground control shall be prepared in State Plane Coordinates to match the Phase 1 coordinates basis. Vertical control will be based on the National Geodetic Datum of 1929 (NGVD).

The Conceptual Design Survey work is not authorized with the Notice to Proceed, and may be authorized in writing by the County. If it is not authorized, the County will supply the required information.

Task 3.0 - Topographic Mapping

Aerial mapping will be based on that obtained previously for the Phase 1 Floodplain Delineation.

Task 4.0 - Hydrology

The 100-year hydrology for the study area will be based upon the Phase 1 Floodplain Delineation hydrology. The runoff from the 2-, 10-, 25-, 50-year events will be determined from the USGS Regional Regression equations. The existing condition land use will be used within the watershed. The hydrologic data will be incorporated into the Conceptual Alternatives Final Report.

A subbasin delineation map with a single concentration point where Miami Wash enters Roosevelt Lake will be prepared and submitted. The total drainage area to the concentration point will be determined along with the 2-, 10-, 25-, 50-, and 100-year estimated runoff rates. No calibration of these runoff rates will be attempted, and the mean basin elevation will be estimated, not calculated. A hydrology letter-report will be submitted to the County containing this information.

Task 5.0 - Floodplain Mapping

The 100-year floodplain information will be taken from the Phase 1 Floodplain Delineation maps and the HEC-RAS computer model.

Task 6.0 - Alternative Formulation

Hydraulic calculations will be prepared to estimate the capacity of existing facilities using Manning's equation, backwater computations, or culvert analysis, as appropriate. The HEC-RAS model developed in the Phase 1 Floodplain Delineation will be utilized as fully as possible. A maximum of three conceptual drainage alternatives will be presented for "Taco Bell Wash."

For most of the wash, the inadequacy of the existing wash or roadway crossing will be obvious. The alternatives that would mitigate the flooding would probably be limited to improving the culvert or wash capacity, or both. A table will present the hydraulic solutions for the 2-, 10-, 25-, 50-, and 100-year storm events.

Task 7.0 - Alternatives Evaluation

After the alternatives are developed and screened, additional hydraulic analyses will be prepared as needed and cost estimates developed. At maximum three conceptual alternatives will be prepared for the identified flooding problems. The evaluation criteria for the alternatives will be based on engineering feasibility, construction cost, impact to property owners, potential for obtaining easements, advantages and disadvantages, the level of protection, utility conflicts and maintenance considerations.

The level of protection (i.e., design storm) will be discussed with the County. For some flooding problems, the recommended solution will be clear. To assist in protection level, a table will be prepared, showing the costs associated with varying protection levels and alternative features or size. The County, with input from the Engineer, will make an informed decision for the Recommended Alternative.

7.1 Utility evaluation

The screened alternatives will be evaluated for utility conflicts. Critical utility conflicts will be determined from available "As-built" plans and aboveground field survey.

Task 8.0 - Final Report and Design Recommendation

The results of the Conceptual Alternatives will be presented in a bound report. The report will discuss all aspects of the project, including surveying, mapping, hydrology, alternative formulation and analyses, cost estimates, approximate easement sizes, utility conflicts, maintenance considerations, and the alternative advantages and disadvantages. The design recommendation will be portrayed on an 11-inch x 17-inch drawing showing simple plan and profile data. Color photocopies of appropriate photographs will also be presented in the report.

Task 9.0 - Conceptual Alternatives Deliverables

- Sealed survey notes, and associated computer files.
- Four (4) copies of the Miami Wash Hydrology Letter-Report.
- Four (4) copies of the Alternative Formulation Hydraulic Solutions Table.
- Four (4) copies of the Conceptual Alternatives Final Report and Design Recommendation, any associated computer files and one unbound reproducible report copy.